DOCKET FILE COPY ORIGINAL

September 23, 1997

Secretary

Federal Communications Commission

1919 M Street, NW

Washington, DC 20554

Enclosed are one original and copies of the Formal Comments of Multi-Technical Services, Incorporated, in the Matter of Amendment of Part 11 of the FCC Rules Governing the Emergency Alert System, designated **RM-9156**.

Thank You,

Lynwood A. Williams
President and CEO

Before the

Federal Communications Commission

Washington, DC 20554

In the Matter of	)	
	)	
Amendment of Part 11 of the FCC Rules	)	**RM-9156**
	)	
Governing the Emergency Alert System	)	
	)	

To: The Commission

The Formal Comments of Multi-Technical Services, Incorporated

Multi-Technical Services, Incorporated (*MTS*) is a manufacturer of an Emergency Alert System decoder-encoder approved by the FCC for use in broadcast, cable, and other facilities required by the Rules to participate in the EAS.

These comments are timely filed in response to a Petition for Rulemaking advanced by the Society of Broadcast Engineers, Incorporated (*Petitioner*).

MTS partially supports and partially opposes the provisions of the petition for the reasons discussed herein.

(Response to: *Item 1: Extending the relay window for tests and changing to quarterly mandated tests*)

Petitioner proposes sweeping changes to the EAS, adds a new and very different transmission protocol, and simultaneously promotes an almost total cessation of regular tests. Only when EAS is completely operational and thoroughly tested should this change be considered. The system is neither fully implemented nor adequately tested. Cable providers, for example, have yet to participate in any meaningful fashion.

(Response to: *Item 2: Optional two-tone attention signal*)

MTS agrees that the two-tone attention signal has, in most cases, outlived its usefulness and that the attention signal should be made an optional part of the EAS message.

(Response to: *Item 3: Modulation level of EAS audio tones*)

Broadcasters have difficulty acheiving the minimum modulation levels for EAS data and the two-tone attention signal. Many broadcasters cannot meet this requirement, yet transmission of EAS over their facilities is not impeded by the lower modulation levels commonly in use.

We support changing the minimum required modulation level to 50% for EAS data. If the two-tone attention signal is made optional,

the modulation level should also be determined according to the needs of the area served by a broadcaster electing to send the tones. No minimum level need be specified for the two-tone attention signal.

(Response to: *Item 4: Specific location codes and restrictions*)

The true effect of this part of the petition is to change the meaning of EAN. The Commission intends that the event code EAN be used to signal a national activation of the EAS. As such, the location code is irrelevant. We oppose changing the meaning of EAN.

However, we do not oppose the creation of one or more new event codes, which would serve the purpose for the changed EAN outlined by Petitioner. Such new codes would be subject to the same validation of location as the other non-EAN events are now, and would eliminate the confusion arising from multiple meanings of a particular event code.

We do not support restricting the use of CCC code 000 to facilities bearing a "special" designation in their EAS plans. Except for the SSCCC code of 00000, all participants must be allowed to originate EAS events, as the prevailing emergency conditions require.

(Response to: *Item 5: Adding a protocol for text transmission*)

The need for a lengthy free-form text protocol within the EAS is not well established by Petitioner's comment that "it has become obvious this lack of text transmission is causing the system appreciable criticism." MTS has received no request for text capability.

Television broadcasters wishing to better serve hearing-impaired members of their audiences are free to do so without additional regulations.

We are unable to confirm Petitioner's claim that the emergency management community is anxious to have text transmission capability added to EAS. Indeed, our own conversations with emergency management officials indicated the opposite. Those we interviewed did not want the capability, the expense, or the additional responsibility of entering text messages on a terminal.

The ability of an EAS message to define areas smaller than 1/9th of a county will not be changed by the addition of a text protocol. The real effect will be confusion resulting from a standard EAS message that specifies the warned area in one way, and a text message that defines the area differently. In reality, the EAS is not the best way to warn an area as small as a city block.

It is difficult to imagine the proposed text protocol replacing the existing interaction between emergency managers and the broadcast media. The existing system of news releases, news conferences and question and answer sessions convey far more detailed information about an emergency than could the 1,335 character text message proposed by Petitioner.

Petitioner attempts to mislead the Commission by stating that an industry sample was made and that debate ensued over the best way to implement the text protocol. No such sample was made, and there was no debate. Petitioner's "sample" of the industry was in the form of a letter sent to manufacturers announcing that the EAS would soon be changed. The letter further stated that Petitioner had developed the text protocol "working with one manufacturer" and that all manufacturers would be required to comply with the new specifications.

Transmitting the lengthy text protocol takes far too long. Appendix A of these comments shows a detailed calculation of this time. A maximum length text message requires nearly *seventy seconds* of continuous data tones. Broadcasters, who have already complained about the length of the two-tone attention signal and the National Weather Service Warning Alarm Tone, are quite unlikely to embrace the requirement that they send AFSK data tones for seventy seconds.

Radio broadcasters, faced with the prospect of lengthy data transmissions that are of no value to their listening audience, will likely suspend all EAS operation beyond the required EAN/EAT

and periodic tests. Television broadcasters are conveniently exempt from the text protocol transmission of most EAS events.

The cost of implementation of the text protocol is substantial and since most of the listening public receives no benefit from it, unwarranted.

The National Weather Service, which is one of the most active inputs to the EAS, has no interest whatever in participating in the conversion of EAS (WRSAME) to include the lengthy free-form text protocol.

(Response to: *ITEM 6: Co-owned, co-located "key" stations*)

We agree that confusion results when key stations originate the same event on different co-located stations at different times. We also agree that EAS equipment should provide the option to rebroadcast an original EAS event without changing any fields in the header codes.

(Response to: *ITEM 7: TV station airing of crawl-only EAS messages*)

Members of the television audience who are unable to see the video crawl will be left without any warning of any kind. The reduction in the quality and quantity of service is unwarranted and contrary to the public interest.

(Response to: *ITEM 8: Carrying the President's audio from a non-EAS source*)

Petitioner raises valid concerns regarding the quality of the audio signal. Most EAS decoders and encoders offer only minimal fidelity in their audio paths. Some delay the audio by a small amount of time as it is passed through the system, which will certainly cause the synchronization of audio and video to become disparate.

We support modification of the rules to allow television broadcasters to transmit presidential messages from whatever source they deem appropriate, provided, however, that the requirement to transmit the entire EAS message in the aural channel is retained.

(Response to: *ITEM 9: Restoration of the EAN network*)

We have no preference as to the outcome of the proposal to restore the EAN Network.

(Response to: *ITEM 10: Additional event codes*)

We offer no objection to the creation of new event codes that more accurately define the nature of the EAS activation, but we do not support changing the meaning of the event codes EAN or EAT.

(Response to: *ITEM 11: LECC concerns*)

1. Because participation in the EAS at the local level is not required for broadcast license renewal, we see no need for the Commission to further burden itself or broadcasters with the meaningless paperwork suggested by Petitioner.

2. EAS events are required to be documented in the station's operating log. Licensees are not restricted from also documenting EAS events in their public files, so there is no need for a Commission rule in this matter.

3. Petitioner incorrectly assumes the Commission's authority to require participation in EAS by entities other than those holding broadcast licenses. Since the Commission does not mandate broadcast participation at the local level, it is illogical to propose a rule obligating any local emergency managers' participation, whether by signature on a local plan or by any other mandatory participation in the EAS during emergencies.

4. We express no preference in the composition of the National Advisory Committee.

5. Requiring immediate retransmission of EAS events containing the EVI (evacuate immediately) code is reasonable and would benefit the public. We support the suggestion that EVI be included in the list of messages that must be immediately relayed.

6. We do not agree that there is any need to mandate inclusion of EAS capability in consumer receivers. Receiver manufacturers will provide EAS capability upon consumer demand, without additional regulations.

7. The present rules provide for voluntary participation of any appropriate entity, and we support the continuation of this policy.

Summary

MTS, Incorporated, urges the Commission to issue a Notice of Proposed Rulemaking which includes Items 2, 3, 6, 8, and 10, and Item 11 at paragraph 5. The changes to the EAS Rules proposed by these items would benefit the public, relieve broadcasters of unnecessary regulations, and improve the EAS.

We express no preference in the outcome of Item 9.

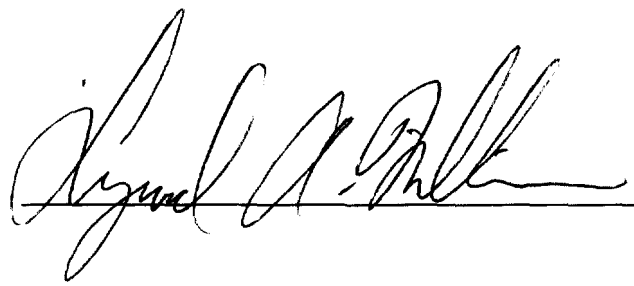
We do not support, and urge the Commission to exclude from further consideration, the remaining provisions of the petition because they are contrary to the public interest, are unnecessarily burdensome, and would result in the degradation of the valuable service afforded the public by the EAS.

These Comments are respectfully submitted by:

Multi-Technical Services, Incorporated

150 Clayton Commerce Center

Clayton, North Carolina

By 

Lynwood A. Williams, President and CEO

Multi-Technical Services, Incorporated

September 22, 1997

APPENDIX A

(Calculation of the length of time to transmit a maximum length EAS text message)

There are 300 characters in a message fragment. Each fragment is sent twice, so one complete message fragment contains 600 characters and two pauses of one second each.

At 52.8 characters per second, a 300 character fragment requires 300 / 52.8 = 5.68 seconds to transmit. There is a one-second pause after each fragment which yields a total on-the-air time of (5.68 + 1) x 2 = 13.36 seconds per fragment.

A single event may contain up to five message fragments, so the time required for transmission of a maximum length text message is 13.36 x 5 = 66.8 seconds. Remember, this 66.8 second transmission is in addition to the present EAS message transmission requirement.

An EAS header containing the maximum number (32) of PSSCCC (FIPS) location codes has 275 characters. At 52.8 characters per second, each header takes 5.2 seconds. A one-second pause is inserted after each header. The header is sent three times, giving a total transmission time of (5.2 + 1) x 3 = 18.6 seconds per EAS message header.

The EOM code contains 20 characters including the preamble, and a one-second pause is inserted after each of the three transmissions. The EOM requires (0.38 + 1) x 3 = 4.14 seconds to transmit.

An EAS message may contain up to 120 seconds of audio message.

We may now calculate the total time required to transmit one maximum length EAS message that includes the text protocol suggested by Petitioner by the formula:

HEADER + AUDIO + EOM + TEXT = TOTAL TIME

Substituting values:

18.6 + 120 + 4.1 + 66.8 = **209.5 seconds = 3 minutes, 29.5 seconds**

CERTIFICATE of SERVICE

I certify that, pursuant to 47CFR 1.405(a) and 1.419(b), copies of this document were sent via Federal Express Overnight courier on Tuesday, September 23, 1997, to the following:

Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

(Original and four copies)

The Society of Broadcast Engineers, Inc. (Petitioner)
8445 Keystone Crossing, Ste. 140
Indianapolis, Indiana 46240

Attn: Mr. Terrence M. Baun, President
Attn: Mr. Dane E. Ericksen, Chairman, SBE FCC Liaison Committee
Attn: Mr. Leonard D. Charles, Chairman, SBE EAS Committee

(Three copies)

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Certified on September 23, 1997 by

Lynwood A. Williams, President & CEO
Multi-Technical Services, Incorporated